

In the Claims:

Please add new Claims 68-106 as indicated below.
Substitute pages containing all pending claims are attached,
and the entry of these pages is requested.

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68. A therapeutic antibody that specifically binds an epitope contained within positions 10-25 of A β .
69. A therapeutic antibody that sequesters A β peptide from its bound, circulating form in blood, and alters clearance of soluble and bound forms of A β in central nervous system and plasma.
70. A therapeutic antibody that sequesters free β -amyloid in the blood and impedes passage of soluble β -amyloid out of the peripheral circulation.
71. A therapeutic antibody that sequesters free β -amyloid in the blood, reduces levels of β -amyloid in the brain of an animal and prevents formation of amyloid plaques in the brain of the animal.
72. The therapeutic antibody of claims 68-71 that is a whole antibody.
73. The therapeutic antibody of claims 68-71 that is a fragment.

74. The therapeutic antibody of claims 68-71 that specifically binds to an epitope having an amino acid between positions 10 and 25 of A β .
75. The therapeutic antibody of claim 68-71 that specifically binds to an epitope having an amino acid between positions 14 and 25 of A β .
76. The therapeutic antibody of claim 68, which specifically binds an epitope contained in positions 14-25 of said A β peptide.
77. The therapeutic antibody of claims 68-71, which is a single chain antibody.
78. An antibody fragment obtained from the therapeutic antibody of any one of claims 68-77.
79. The fragment of claim 78, which is a Fab or F(ab')₂ fragment.
80. The fragment of claim 79, which is an F(ab')₂ fragment.
81. The fragment of claim 79, which is an Fab fragment.
82. The therapeutic antibody or fragment of any one of claims 68-77, wherein the antibody or fragment thereof is produced in a myeloma cell.
83. The therapeutic antibody or fragment of any one of claims 68-82, which, when administered peripherally to

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a human subject, does not need to cross the subject's blood-brain barrier to exert its beneficial effects.

84. The therapeutic antibody or fragment of any one of claims 68-82, which, when administered peripherally to a human subject, does not require cellular responses in the subject's brain to exert its beneficial effects.
85. The therapeutic antibody or fragment of any one of claims 68-82, which, when administered peripherally to a human subject, does not substantially bind aggregated A β in the subject's brain.
86. The therapeutic antibody or fragment of any one of claims 68-82, which, when administered peripherally to a human subject, exhibits beneficial effects without necessarily binding to A β plaques in the brain.
87. A nucleic acid, comprising a sequence coding for the light chain or the heavy chain of the antibody of any one of claims 68-86, or a fragment thereof.
88. One or more nucleic acids, which when expressed in a suitable host cell, yield an antibody of any one of claims 68-86.
89. An expression vector for expressing the antibody or fragment of any one of claims 68-86 comprising nucleotide sequences encoding said antibody or fragment.

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90. A cell transfected with the expression vector of claim 89.
91. A cell transfected with two expression vectors of claim 89, wherein a first vector comprises a nucleotide sequence encoding a light chain and a second vector comprises a nucleotide sequence encoding a heavy chain.
92. A recombinant cell that produces the therapeutic antibody or fragment of any one of claims 68-82.
93. The cell of any one of claims 90-92, wherein the cell is a myeloma cell.
94. A composition that comprises the antibody or fragment of any one of claims 68-86, and a sterile diluent.
95. A method to inhibit the formation of amyloid plaques or the effects of toxic soluble A β species in humans, which method comprises administering to a human subject in need of such inhibition an effective amount of a therapeutic antibody or fragment thereof that specifically immunoreacts with an epitope contained in positions 10-25 of A β .
96. A method to reduce amyloid plaques or the effects of toxic soluble A β species in humans, which method comprises administering to a human subject in need of such reduction an effective amount of a therapeutic antibody or fragment thereof which specifically immunoreacts with an epitope contained in positions 10-
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25 of A β .

97. A method to inhibit the formation of amyloid plaques or the effects of toxic soluble A β species in humans, which method comprises administering to a human subject in need of such inhibition an effective amount of a therapeutic antibody or fragment thereof that sequesters A β peptide from its bound, circulating form in blood.
98. A method to reduce amyloid plaques or the effects of toxic soluble A β species in humans, which method comprises administering to a human subject in need of such reduction an effective amount of a therapeutic antibody or fragment thereof which sequesters A β peptide from its bound, circulating form in blood.
99. The method of any of claims 95-98, wherein said antibody or fragment, when administered peripherally to humans, does not need to cross the blood-brain barrier to inhibit the formation of amyloid plaques or the effects of toxic soluble A β species.
100. The method of any of claims 95-98, wherein said antibody or fragment, when administered peripherally to humans, does not require cellular responses to inhibit the formation of amyloid plaques or the effects of toxic soluble A β species.
101. The method of any of claims 95-98, wherein said antibody or fragment, when administered peripherally to

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